the application. Cancel the page numbers of the Claims and Abstract and renumber as pages 76-83, accordingly.

REMARKS

The amendments to paragraphs beginning on pages 26, 27, 53, 60, 63, 68 and 73 were made to correct errors of a typographical nature and to bring the numbering of sequences into conformity with the order of sequences as found in the Sequence Listing submitted herewith.

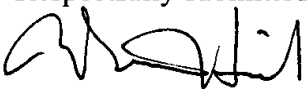
Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the above named sequences, SEQ ID NOS:1-61, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

The information contained in the computer readable disk was prepared through the use of the software program "PatentIn" and is identical to that of the paper copy. This amendment contains no new matter.

Attached hereto is a marked-up version of the changes made to the Specification by the current Amendment. The attached pages are captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE.**"

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Paragraph beginning at line 18 of page 26 has been amended as follows:

As used herein, the term "AGL27" or "AGL27 gene product" means a gene product that is characterized, in part, by having an amino acid sequence substantially identical to SEQ ID NOS:40 or 41 ~~SEQ ID NO: 36~~. An exemplary AGL27 cDNA nucleic acid sequence is displayed as SEQ ID NO:39. An alternatively spliced AGL27 cDNA, and resulting translated product, are displayed as SEQ ID NO:49 and SEQ ID NO:50 ~~SEQ ID NO:48 and SEQ ID NO:49~~.

Paragraph beginning at line 4 of page 27 has been amended as follows:

As used herein, the term "characterized by early reproductive development," when used in reference to a non-naturally occurring seed plant of the invention, means a non-naturally occurring seed plant that forms reproductive structures at an earlier stage than when reproductive structures form on a corresponding naturally occurring seed plant that is grown under the same conditions and that does not ectopically express a floral meristem identity gene product. In addition, "characterized by early reproductive development" also refers to the formation of reproduction structures at an earlier stage than a plant identical except for the lack of ectopic expression of the nucleic acids of the invention (e.g., polynucleotides substantially similar to nucleic acid molecules encoding SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:28, SEQ ID NO:30, SEQ ID NO:32, SEQ ID NO:34, SEQ ID NO:36, SEQ ID NO:38 or SEQ ID NOS:40 or 41 ~~SEQ ID NO:40~~). Note that "stage," as used above, refers to either the amount of time from germination of seed

or the number of leaves that a plant produces prior to initiation of reproductive structures. Similarly, "characterized by late reproductive development" or "characterized by delayed reproductive development" refers to the delayed development of reproductive structures compared to a naturally-occurring seed plant or to a plant, natural or transgenic, that does not ectopically express a nucleic acid of the invention. The reproductive structure of an angiosperm, for example, is a flower, and the reproductive structure of a coniferous plant is a cone. For a particular naturally occurring seed plant, reproductive development occurs at a well-defined time that depends, in part, on genetic factors as well as on environmental conditions, such as day length and temperature. Thus, given a defined set of environmental condition and lacking ectopic expression of a floral meristem identity gene product, a naturally occurring seed plant will undergo reproductive development at a relatively fixed time.

Paragraph beginning at line 16 of page 53 has been amended as follows:

Any floral meristem identity gene product, as defined herein, is useful in a chimeric protein of the invention. Thus, a nucleic acid molecule encoding *Arabidopsis thaliana* AP1 (SEQ ID NO:2 ~~SEQ ID NO: 2~~), *Brassica oleracea* AP1 (SEQ ID NO:4 ~~SEQ ID NO: 4~~), *Brassica oleracea* var. *Botrytis* AP1 (SEQ ID NO:6 ~~SEQ ID NO: 8~~) or *Zea mays* AP1 (SEQ ID NO:8 ~~SEQ ID NO: 10~~), each of which have activity in converting shoot meristem to floral meristem, can be used to construct a nucleic acid molecule encoding a chimeric protein of the invention. Similarly, a nucleic acid molecule encoding, for example, *Arabidopsis thaliana* CAL (SEQ ID NO:10 ~~SEQ ID NO: 10~~), *Brassica oleracea* CAL (SEQ ID NO:12 ~~SEQ ID NO: 12~~), or a nucleic acid molecule encoding *Arabidopsis thaliana* LFY (SEQ ID NO:16 ~~SEQ ID NO: 16~~) is useful when linked in frame to a nucleic acid molecule encoding a ligand binding domain to produce a nucleic acid molecule encoding a ligand-dependent chimeric protein of the invention. Similarly, nucleic acids encoding SEP1, SEP2, SEP3, AGL20, AGL22,

AGL24 or AGL27 can be operably linked to a nucleic acid encoding a ligand binding domain.

Paragraph beginning at line 16 of page 60 has been amended as follows:

The invention also provides a substantially purified nucleic acid molecule encoding a CAULIFLOWER ~~CALIFLOWER~~ gene product such as *Arabidopsis thaliana* CAL (SEQ ID NO:10 ~~SEQ ID NO: 10~~) or *Brassica oleracea* CAL (SEQ ID NO:12 ~~SEQ ID NO: 12~~). The invention also provides nucleic acid molecules encoding SEP1 (SEQ ID NO:28), SEP2 (SEQ ID NO:30), SEP3 (SEQ ID NO:32), AGL20 (SEQ ID NO:34), AGL22 (SEQ ID NO:36), AGL24 (SEQ ID NO:38) or AGL27 (SEQ ID NO:40 or 41 ~~SEQ ID NO:40~~).

Paragraph beginning at line 22 of page 63 has been amended as follows:

Such an active fragment can be produced using well known recombinant DNA methods (Sambrook et al., *supra*, 1989). Similarly, an active fragment can be, for example, an amino terminal, carboxyl terminal or internal fragment of *Arabidopsis thaliana* CAL (SEQ ID NO:10 ~~SEQ ID NO: 10~~) or *Brassica oleracea* CAL (SEQ ID NO:12 ~~SEQ ID NO: 12~~) that has activity, for example, in converting shoot meristem to floral meristem in an angiosperm. The product of the *BobCAL* gene (SEQ ID NO:14 ~~SEQ ID NO: 24~~), which is truncated at amino acid 150, lacks activity in converting shoot meristem to floral meristem and, therefore, is an example of a polypeptide portion of a CAL floral meristem identity gene product that is not an "active fragment" of a floral meristem identity gene product.

Paragraph beginning at line 1 of page 68 has been amended as follows:

SEP3K, SOC1K, SVPK, AGL24K and SOC1KC/2 were generated by polymerase chain reaction (PCR) from the relevant cDNAs using oligos with the appropriate restriction site for posterior cloning into pBI771. The following primers were used (SEQ ID NOS:51-59):

SEP3-5'K: 5'-CCGTCGACCCATGAGCCAGCAGGAGTATCTC-3'
SEP3-3'Kbox: 5'-CCGCGGCCGCCTTACTCTGAAGATCGTT-3'
SOC1-5'K: 5'-CCGTCGACCCATGAAATATGAAGCAGCAAAC-3'
SOC1-3'Kbox: 5'-CCGCGGCCGCCTCCTTTTGCTTGAGCTG-3'
SOC1-C/2: 5'-CCGCGGCCGCACTTTCTTGATTCTTATT-3'
SVP-5'K: 5'-CCGTCGACCCATGAGTGATCACGCCCGAATG-3'
SVP-3'Kbox: 5'-CCGCGGCCGCTCCCTTTTTCTGAAGTTC-3'
AGL24-5'K: 5'-CCGTCGACCCATGCTTGAGAATTGTAACCTC-3'
AGL24-3'Kbox: 5'-CCGCGGCCGCCTCAAGTGAGAAAATTTG-3'

The PCR products were subcloned directly into pCRII (invitrogen) and then digested with SalI-NotI for next subcloning into pBI-771. All constructs were confirmed by sequencing.

Paragraph beginning at line 22 of page 73 has been amended as follows:

Construction of the 35S::SEP3 construct was as follows: cDNA was isolated by RT-PCR using the oligos OAM37: 5'-TAGAAACATCATCTTAAAAAT-3' (SEQ ID NO:60) and SEP3-5': 5'-CCGGATCCAAAATGGGAAGAGGGAGA-3' (SEQ ID NO:61). This cDNA was first cloned into pCRII (invitrogen) and then digested with BamHI for insertion into the BamHI site of pCGN18 (which contains 35S promoter) to produce sense lines, and confirmed by sequencing. The cDNA cloned into pCRII was digested with BamHI and BglII, the 363bp band corresponding to the 5' end of the cDNA was cloned in antisense orientation into the BamHI site of pBIN-JIT (plasmid carrying

two 35S promoters in tandem). The 35S::SEP3 sense and antisense constructs were introduced into *Arabidopsis*, ecotype *Columbia*, by vacuum infiltration (Bechtold *et al.*, *C. R. Acad. Sci.* 316, 1194-1199 (1993)) and transgenic plants were selected on Kanamycin plates.